BO YANG

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EDUCATION

Georgia Institute of Technology — Dec 2025

- M.S. Computer Science, GPA: 3.87
- Select Coursework: System Design in Cloud Computing, Graduate Algorithms, Deep Learning, Advanced Operating Systems, Artificial Intelligence, Database System Implementation

University of Connecticut

- B.S.E. Civil Engineering

WORK HISTORY

Ingenimax — Dec 2024 – Jan 2025

Engineering Intern

- Contributed to the code base for a platform engineering AI agent that deployed Kubernetes and AWS containers based on client needs.
- Tested LLM query, chain of thought, context fetching functionalities.

South Col Engineering, P.C. — Aug 2021 – Present

Structural Engineer

- Conduct inspections of in-service bridges in New York State Region 8 for NYSDOT as subcontractor to WSP.
- Process field data and perform structural loss calculations. Compile inspection reports in NYSDOT's Bridge Data Information System.

PROJECTS

MapReduce

- Built MapReduce in Rust and deployed on Azure Kubernetes Service using etcd for leader election and fault tolerance.
- Map and reduce services were implemented via gRPC/Tokio using client master pods and server Map/Reduce workers. Files were managed via Azure Blob Storage.
- Wrote a local client CLI that submits jobs with custom map/reduce scripts to the master leader pod.

Network Function Virtualization Orchestrator

- Implemented a software-defined networking controller and network function manager on a virtual network.
- Implemented load balancer, firewall, NAT, as well as a test suite that generated and monitored network traffic.

Lightweight Convolutional Neural Network

- Developed a distributed solver using PyTorch and Hugging Face Accelerate for parallel model training on GaTech's high performance computing cluster.
- Implemented a pruning methodology using structured and unstructured pruning to achieve significant parameter reduction (up to 52% on DenseNet121) while maintaining high model accuracy on CIFAR-10 and ImageNet.

SKILLS

- **Programming Languages**: Python, C, C++, Golang, Rust
- **Frameworks and Tools**: PyTorch, MLflow, NumPy, pandas, Libvirt, OpenMP, MPI, gRPC, Ryu, Docker, Kubernetes, etcd, Azure, AWS, Flask, SQL, Git
- **Languages**: English (native), Mandarin Chinese (native)